## C5100n

── USER'S GUIDE





#### **PREFACE**

Every effort has been made to ensure that the information in this document is complete, accurate, and up-to-date. The manufacturer assumes no responsibility for the results of errors beyond its control. The manufacturer also cannot guarantee that changes in software and equipment made by other manufacturers and referred to in this guide will not affect the applicability of the information in it. Mention of software products manufactured by other companies does not necessarily constitute endorsement by the manufacturer

While all reasonable efforts have been made to make this document as accurate and helpful as possible, we make no warranty of any kind, expressed or implied, as to the accuracy or completeness of the information contained herein.

The most up-to-date drivers and manuals are available from the Oki Europe website:

#### http://www.okieurope.com

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As an Energy Star Program Participant, the manufacturer has determined that this product meets the Energy Star guidelines for energy efficiency.



This product complies with the requirements of the Council Directives 89/336/EEC (EMC) and 73/23/EEC (LVD) as amended where application on the approximation of the laws of the member states relating to 89/336/EEC (EMC) and 73/23/EEC (LVD) as amended where applicable electromagnetic compatibility and low voltage.

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### **NOTES, CAUTIONS AND WARNINGS**

#### NOTE

A note appears in this manual like this. A note provides additional information to supplement the main text which may help you to use and understand the product.

#### **CAUTION!**

A caution appears in this manual like this. A caution provides additional information which, if ignored, may result in equipment malfunction or damage.

#### **WARNING!**

A warning appears in this manual like this. A warning provides additional information which, if ignored, may result in a risk of personal injury.

#### INTRODUCTION

Congratulations on buying an Oki colour printer. Your new printer is designed with advanced features to give you clear, vibrant colour prints and crisp black and white pages at high speed on a range of print media for the office.

Your printer includes these features:

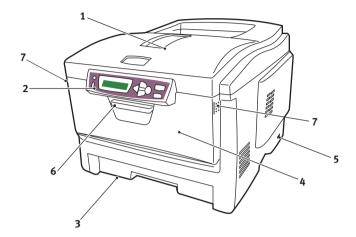
- Up to 12 pages per minute in full colour for fast printing of high impact colour presentations and other documents;
- Up to 20 pages per minute in black and white for fast and efficient printing of all general purpose documents not requiring colour;
- > 600 x 1200dpi (dots per inch) print resolution for high quality image production showing the finest detail;
- Single Pass Colour Digital LED technology for high speed processing of your printed pages;
- > 10Base-T and 100Base-TX network connection lets you share this valuable resource among users on your office network;

Additionally, the following optional features are also available:

- Automatic two-sided (duplex) printing for economical use of paper and compact printing of larger documents;
- Additional paper tray for loading a further 530 sheets at a time to minimise operator intervention, or different paper stocks for letterhead stationery, alternative paper sizes or other print media.
- Additional memory allows printing of more complex pages, including two sided and booklet pages with the optional duplex unit.

#### PRINTER OVERVIEW

#### **FRONT VIEW**

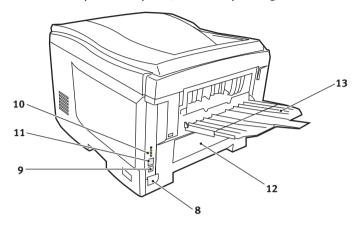


- Output stacker, face down. Standard printed copy delivery point. Holds up to 250 sheets at 80g/m².
- Operator panel.
   Menu driven operator controls and LCD display panel.
- Paper tray.
   Standard blank paper tray.
   Holds up to 300 sheets of 80g/m² paper.
- Multipurpose feeder.
   Used for feeding heavier paper stocks, envelopes and other special media. Also for manual feeding of single sheets when required.
- 5. ON/OFF switch.
- 6. Front Cover release (lift).
- 7. Multipurpose feeder release (2) (press).

The LCD display language can be changed to show any of 12 different languages. (See "Changing the display language" on page 9.)

#### **REAR VIEW**

This view shows the connection panel, the rear output stacker and the location of the optional duplex (two-sided printing) unit.



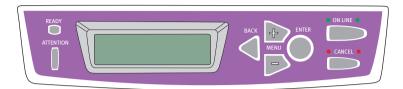
- 8. AC power socket.
- 9. USB interface.
- 10. Network status lights.
- 11. Network interface.\*
- 12. Location of optional duplex unit.
- 13. Rear, face up, 100 sheet stacker.

When the rear paper stacker is folded down, paper exits through the rear of the printer and is stacked here face up. This is mainly used for heavy print media. When used in conjunction with the multipurpose feed tray, the paper path through the printer is essentially straight. This avoids bending the paper around curves in the paper path and enables feeding of up to 203g/m² media.

<sup>\*</sup> The Network Interface has a protective "plug" which must be removed before connection can be made.

#### CHANGING THE DISPLAY LANGUAGE

The language used by your printer for display messages and for report printing can be changed quickly and easily as follows:



- Press the + key repeatedly to access the System Configuration Menu.
- 2. Press the **ENTER** key to enter the System Configuration Menu.
- 3. Press the key to move directly to the last item in this menu: LANGUAGE.
- **4.** Press **ENTER** to change this setting.
- 5. Use the +/- keys to move in either direction through the list of available languages until the language you want is displayed.
- **6.** Press the **ENTER** key to select this language.
- **7.** Press the **ON LINE** key to exit the menu system and return the printer to standby.

The LCD display language can be changed to any of these languages:

English	Norwegian	
German	Danish	
French	Dutch	
Italian	Turkish	
Spanish	Portuguese	
Swedish	Polish	

#### PAPER RECOMMENDATIONS

Your printer will handle a variety of print media, including a range of paper weights and sizes, transparencies and envelopes. This section provides general advice on choice of media, and explains how to use each type.

The best performance will be obtained when using standard 75~90g/m<sup>2</sup> paper designed for use in copiers and laser printers. Suitable types are:

- Ajro Wiggins Colour Solutions 90g/m²;
- > Colour Copy by Neuisedlier.

Use of heavily embossed or very rough textured paper is not recommended.

**Pre-printed stationery** can be used, but the ink must not offset when exposed to the high fuser temperatures used in the printing process.

**Envelopes** should be free from twist, curl or other deformations. They should also be of the rectangular flap type, with glue that remains intact when subjected to hot roll pressure fusing used in this type of printer. Window envelopes are not suitable.

**Transparencies** should be of the type designed for use in copiers and laser printers. We strongly recommend Oki transparencies (Order No. 01074101). In particular, avoid office transparencies designed for use by hand with marker pens. These will melt in the fuser and cause damage.

**Labels** should also be of the type recommended for use in copiers and laser printers, in which the base carrier page is entirely covered by labels. Other types of label stock may damage the printer due to the labels peeling off during the printing process. Suitable types are:

- Avery White Laser Label types 7162, 7664, 7666 (A4), or 5161 (Letter);
- > Kokuyo A693X series (A4) or A650 (B5).

#### CASSETTE TRAYS

Size	Dimensions	Weight (g/m²)	
A6 (Tray 1 only)	105 x 148mm		
A5	148 x 210mm		
B5	182 x 257mm	Light	64-74g/m <sup>2</sup>
Executive	184.2 x 266.7mm	Medium	75-90g/m <sup>2</sup>
A4	210 x 297mm	Heavy	91-120g/m <sup>2</sup>
Letter	215.9 x 279.4mm	Ultra heavy	121-176g/m <sup>2</sup>
Legal 13in.	216 x 330mm	ŕ	(Tray 2 only)
Legal 13.5in.	216 x 343mm		
Legal 14in.	216 x 356mm		

If you have identical paper stock loaded in another tray (2nd tray if you have one, or multipurpose tray) you can have the printer automatically switch to the other tray when the current tray runs out of paper. When printing from Windows applications, this function is enabled in the driver settings. (See "Printer Settings in Windows" later in this guide.) When printing from other systems, this function is enabled in the Print Menu. (See "Menu Functions" later in this guide.)

#### **MULTIPURPOSE TRAY**

The multipurpose tray can handle the same sizes as the cassette trays but in weights up to  $203g/m^2$ . For very heavy paper stock use the face up (rear) paper stacker. This ensures that the paper path through the printer is almost straight.

The multipurpose tray can feed paper widths as small as 100mm and lengths up to 1200mm (banner printing).

For paper lengths exceeding 356mm (Legal 14in.) use paper stock between  $90g/m^2$  and  $128g/m^2$  and the face up (rear) paper stacker.

Use the multipurpose tray for printing on envelopes and transparencies. Up to 50 sheets of transparencies or 10 envelopes can be loaded at one time, subject to a maximum stacking depth of 10mm.

Paper or transparencies should be loaded print side up and top edge into the printer. Do not use the duplex (two sided printing) function.

#### **FACE DOWN STACKER**

The face down stacker on the top of the printer can hold up to 250 sheets of  $80g/m^2$  standard paper, and can handle paper stocks up to  $176g/m^2$ . Pages printed in reading order (page 1 first) will be sorted in reading order (last page on top, facing down).

#### **FACE UP STACKER**

The face up stacker at the rear of the printer should be opened and the tray extension pulled out when required for use. In this condition paper will exit via this path, regardless of driver settings.

The face up stacker can hold up to 100 sheets of 80g/m<sup>2</sup> standard paper, and can handle stocks up to 203g/m<sup>2</sup>.

Always use this stacker and the multipurpose feeder for paper stocks heavier than  $176g/m^2$ .

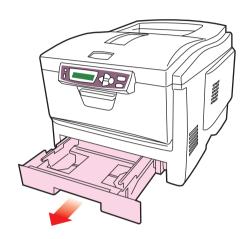
#### **DUPLEX UNIT**

This option provides automatic two sided printing on the same range of paper sizes as tray 2 (i.e. all cassette sizes except A6), using paper stocks from  $75-105g/m^2$ .

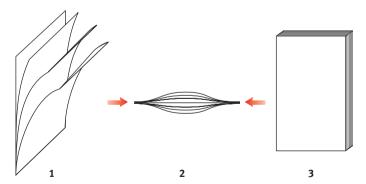
### **LOADING PAPER**

#### **CASSETTE TRAYS**

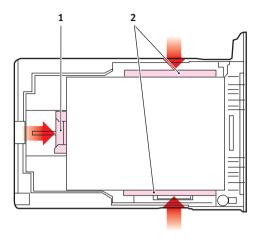
1. Remove the paper tray from the printer.



2. Fan the paper to be loaded at the edges (1) and in the middle (2) to ensure that all sheets are properly separated, then tap the edges of the stack on a flat surface to make it flush again (3).



**3.** Load letter headed paper face down and top edge towards the front of the printer, as shown.

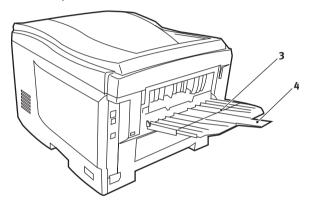


4. Adjust the rear stopper (1) and paper guides (2) to the size of paper being used.

To prevent paper jams:

- > Do not leave space between the paper and the guides and rear stopper.
- > Do not overfill the paper tray. Capacity depends on the type of paper stock.
- Do not load damaged paper.
- Do not load paper of different sizes or types at the same time.
- > Do not pull the paper tray out during printing (except as described below for the 2nd tray).
- Close the paper tray gently.
- 5. If you have two trays and you are printing from the 1st (upper) tray, you can pull out the 2nd (lower) tray during printing to reload it. However, if printing from the 2nd (lower) tray, do not pull out the 1st (upper) tray. This will cause a paper jam.

- 6. For face down printing, make sure the face up (rear) stacker (3) is closed (the paper exits from the top of the printer). Stacking capacity is approximately 250 sheets, depending on paper weight.
- 7. For face up printing, make sure the face up (rear) stacker (3) is open and the paper support (4) is extended. Paper is stacked in reverse order and tray capacity is approximately 100 sheets, depending on paper weight.
- **8.** Always use the face up (rear) stacker for heavy paper (card stock etc.)

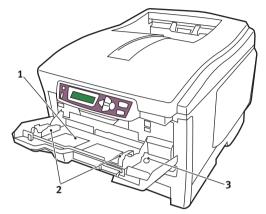


#### **CAUTION!**

Do not open or close the rear paper exit while printing as it may result in a paper jam.

#### MULTIPURPOSE TRAY

1. Open the multi purpose tray and press gently down on the paper platform (1) to ensure it is latched down.



- 2. Load the paper and adjust the paper guides (2) to the size of paper being used.
  - For single sided printing on headed paper load the paper into the multipurpose tray with pre-printed side up and top edge into the printer.
  - For two sided (duplex) printing on headed paper load the paper with pre-printed side down and top edge away from the printer. (Optional duplex unit must be installed for this function.)
  - > Envelopes should be loaded face up with top edge to the left and short edge into the printer. Do not select duplex printing on envelopes.
  - > Do not exceed the paper capacity of about 50 sheets or 10 envelopes. Maximum stacking depth is 10mm.
- **3.** Press the tray latch button (3) inwards to release the paper platform, so that the paper is lifted and gripped in place.

Set the correct paper size for the multipurpose tray in the Media Menu (see "Menu Functions").

#### PRINTER SETTINGS IN WINDOWS

Your printer's operator panel menus provide access to many options.

The Windows printer driver also contains settings for many of these items. Where items in the printer driver are the same as those in the operator panel menus, and you print documents from Windows, the settings in the Windows printer driver will override those items in the operator panel menus.

The illustrations in this chapter show Windows XP. Windows 2000 versions may appear slightly different, but the principles are the same. Windows 9x and Me are substantially different and are covered in a separate chapter.

# PRINTING PREFERENCES IN WINDOWS APPLICATIONS

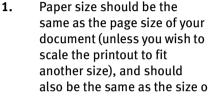
When you choose to print your document from a Windows application program a Print dialogue box appears. This dialogue usually specifies the name of the printer on which you will print your document. Next to the printer name is a **Properties** button.

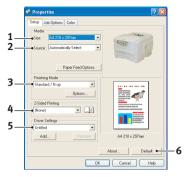


When you click **Properties** a new window opens which contains a short list of the printer settings available in the driver, which you can choose for this document. The settings available from within your application are only those which you may want to change for specific applications or documents. Settings you change here will usually only last for as long as the particular application program is running.

#### **SETUP TAB**

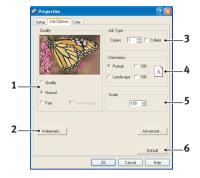
When you click the **Properties** button from your application's Print dialogue, the driver window opens to allow you to specify your printing preferences for the current document.





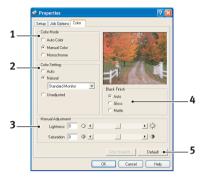
- also be the same as the size of paper you will feed into the printer.
- 2. You can choose the source of the paper to feed, which may be Tray 1 (the standard paper tray), Tray 2 (if you have the optional 2nd paper tray installed) or the multipurpose feeder. You can also click on the appropriate part of the screen graphic to select your preferred tray.
- A variety of document finishing options can be selected, such as normal one page per sheet, or N-up (where N can be any number up to 16) for printing scaled down pages at more than one page per sheet. Booklet printing prints two pages per sheet on each side of the paper so that when folded they make up a booklet. Booklet printing requires the duplex unit to be installed in your printer.
  - Poster printing will print large pages as tiles spread over multiple sheets.
- 4. For two sided printing, you can choose to flip the page by the long edge or the short edge. Of course, this requires that a duplex unit be installed in your printer.
- 5. If you have changed some printing preferences before and saved them as a set, you can recall them to avoid having to set them individually each time you need them.
- **6.** A single on-screen button restores the default settings.

#### **JOB OPTIONS TAB**



- The output resolution of the printed page can be set as follows.
  - > The highest quality setting prints at 600 x 1200dpi.
    This option requires the most printer memory and takes the longest to print.
  - > The normal setting prints at 600 x 600dpi and is adequate for all but the most discerning applications.
  - The fast setting prints at 300 x 300dpi and is suitable for draft documents, where print quality is less critical.
- You can print watermark text behind the main page image.
   This is useful for marking documents as draft, confidential, etc.
- 3. You can select up to 999 copies to print consecutively, although you will need to top up the paper tray during such a long print run.
- 4. Page orientation can be set to either portrait (tall) or landscape (wide).
- 5. You printed pages can be scaled to fit larger or smaller stationery.
- **6.** A single on-screen button restores the default settings.

#### COLOR TAB

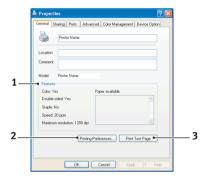


- Control over the colour output of your printer may be performed automatically to using manual adjustment. The automatic setting will be appropriate in most cases. The other options in this window only become visible when you select a choice other than automatic.
- 2. You can choose from a range of colour matching options, depending on the image source for your document. For example, a photograph taken on a digital camera might require different colour matching to a business graphic created in a spreadsheet application. Again, for most general purpose use, automatic is the best choice.
- 3. Printed output may be made lighter or darker, or the colours made more saturated and vibrant as required.
- 4. Black areas may be printed using 100% cyan, magenta and yellow, giving a more glossy appearance, or using only black toner, giving a more matte appearance. Choosing the automatic setting allows the driver to make the most appropriate choice depending on image content.
- 5. A single on-screen button restores the default settings.

#### SETTING FROM WINDOWS CONTROL PANEL

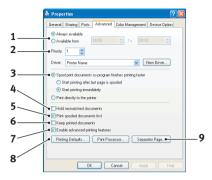
When you open the driver properties window directly from Windows, rather than from within an application program, a somewhat more extensive range of settings is provided. Changes made here will generally affect all documents you print from Windows applications, and will be remembered from one Windows session to the next.

#### **GENERAL TAB**



- 1. This area lists some of the main features of your printer, including optional items, such as duplex (two sided) printing.
- This button opens the same windows as described earlier for items which can be set from within application programs. Changes you make here, however, will become the new default settings for all Windows applications.
- 3. This button prints a test page to ensure that your printer is working.

#### ADVANCED TAB



- You can specify which times of day your printer will be available.
- 2. Indicates current priority, from 1 (lowest) to 99 (highest). Highest priority documents will print first.
- 3. Specifies that documents should be spooled (stored in a special print file) before being printed. The document is then printed in the background, allowing your application program to become available more quickly.
- 4. This specifies that printing should not start until the last page has been spooled. If your application program needs a lot of time for further computation in the middle of printing, causing the print job to pause for more than a short period, the printer could prematurely assume that the document has finished. Selecting this option would prevent that situation, but printing will be completed a little later, as the start is delayed.
- 5. This is the opposite choice to the one above. Printing starts as soon as possible after the document begins spooling.
- 6. This specifies that the document should not be spooled, but printed directly. Your application will not normally be ready for further use until the print job is complete. This requires less disk space on your computer, since there is no spool file.
- 7. Directs the spooler to check the document setup and match it to the printer setup before sending the document to print. If a mismatch is detected, the document is held in the print queue and does not print until the printer setup is changed and the

- document restarted from the print queue. Mismatched documents in the queue will not prevent correctly matched documents from printing.
- 8. Specifies that the spooler should favour documents which have completed spooling when deciding which document to print next, even if completed documents are lower priority than documents which are still spooling. If no documents have completed spooling, the spooler will favour larger spooling documents over shorter ones. Use this option if you want to maximise printer efficiency. When this option is disabled the spooler chooses documents based only on their priority settings.
- 9. Specifies that the spooler should not delete documents after they are completed. This allows documents to be re submitted to the printer from the spooler instead of printing again from the application program. If you use this option frequently it will require large amounts of disk space on your computer.
- 10. Specifies whether advanced features, such as booklet printing, page order and pages per sheet, are available, depending on your printer. For normal printing keep this option enabled. If compatibility problems occur you can disable the feature. However, these advanced options may then not be available, even though the hardware might support them.
- 11. This button provides access to the same setup windows as when printing from applications. Changes made via the Windows Control Panel become the Windows default settings.
- **12.** You can design and specify a separator page that prints between documents. This is particularly useful on a shared printer to help each user find their own documents in the output stack.

#### **COLOR MANAGEMENT TAB**

This window allows you to select which colour matching profile to use in order to obtain the best colour match to your source devices, such as monitor, scanner or camera. Colour matching is an advanced topic covered separately elsewhere in this guide.



#### **DEVICE OPTIONS TAB**

In this window you can select which optional upgrades are installed on your printer. This is covered in more detail in the section in this guide about installing upgrades.



#### WINDOWS 9X DIFFERENCES

Screen presentations of Windows 9x, together with some procedures, are significantly different than other versions of Windows (2000/XP etc.). This Chapter deals mainly with these variations. If necessary, reference should be made to the relevant subject or online help for more information.

#### PRINTER SETTINGS IN WINDOWS

Your printer's operator panel menus provide access to many options.

The Windows printer driver also contains settings for many of these items. Where items in the printer driver are the same as those in the operator panel menus, and you print documents from Windows, the settings in the Windows printer driver will override those items in the operator panel menus.

# PRINTING PREFERENCES IN WINDOWS APPLICATIONS

When you choose to print your document from a Windows application program a Print dialogue box appears. This dialogue usually specifies the name of the printer on which you will print your document. Next to the printer name is a **Properties** button.

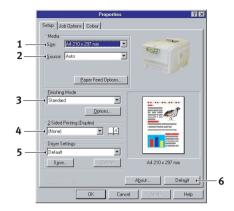


When you click **Properties** a new window opens which contains a short list of the printer settings available in the driver, which you can choose for this document. The settings available from within your application are only those which you may want to change for specific applications or documents. Settings you change here will usually only last for as long as the particular application program is running.

#### **SETUP TAB**

When you click the **Properties** button from your application's Print dialogue, the driver window opens to allow you to specify your printing preferences for the current document.

1. Paper size should be the same as the page size of your document (unless you wish to scale the printout to fit another



size), and should also be the same as the size of paper you will feed into the printer.

- 2. You can choose the source of the paper to feed, which may be Tray 1 (the standard paper tray), Tray 2 (if you have the optional 2nd paper tray installed) or the multi-purpose feeder. You can also click on the appropriate part of the screen graphic to select your preferred tray.
- 3. A variety of document finishing options can be selected, such as normal one page per sheet, or N-up (where N can be any number up to 16) for printing scaled down pages at more than one page per sheet. Booklet printing prints two pages per sheet on each side of the paper so that when folded they make up a booklet. Booklet printing requires the duplex unit to be installed in your printer.

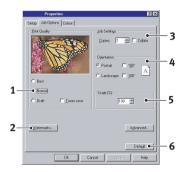
Poster printing will print large pages as tiles spread over multiple sheets.

- 4. For two sided printing, you can choose to flip the page by the long edge or the short edge. Of course, this requires that a duplex unit be installed in your printer.
- 5. If you have changed some printing preferences before and saved them as a set, you can recall them to avoid having to set them individually each time you need them.

**6.** A single on-screen button restores the default settings.

#### **JOB OPTIONS TAB**

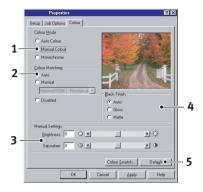
- The output resolution of the printed page can be set as follows:
  - > The highest quality setting prints at 600 x 1200dpi. This option requires the most printer memory and takes the longest to print.



- > The normal setting prints at 600 x 600dpi and is adequate for all but the most discerning applications.
- > The fast setting prints at 300 x 300dpi and is suitable for draft documents, where print quality is less critical.
- You can print watermark text behind the main page image.
   This is useful for marking documents as draft, confidential, etc.
- 3. You can select up to 999 copies to print consecutively, although you will need to top up the paper tray during such a long print run.
- 4. Page orientation can be set to either portrait (tall) or landscape (wide).
- **5.** Your printed pages can be scaled to fit larger or smaller stationery.
- **6.** A single on-screen button restores the default settings.

#### **COLOUR TAB**

adjusted
automatically or
manually. Automatic
adjustment will give
excellent results in
the majority of
instances. However, if
fine adjustment is
needed to brightness
or saturation, select
the Manual Colour
option.



- 2. You can choose from a range of colour matching options, depending on the image source for your document. For example, a photograph taken on a digital camera might require different colour matching to a business graphic created in a spreadsheet application. Again, for most general purpose use, Automatic is the best choice.
- **3.** Printed output may be made lighter or darker, or the colours made more saturated and vibrant as required.
- 4. Black areas may be printed using 100% cyan, magenta and yellow, giving a more glossy appearance, or using only black toner, giving a more matte appearance. Choosing the Automatic setting allows the driver to make the most appropriate choice depending on image content.
- **5.** A single on-screen button restores the default settings.

#### SETTING FROM WINDOWS CONTROL PANEL

When you open the driver properties window directly from the Control Panel, rather than from within an application program, a somewhat more extensive range of settings is provided. Changes made here will affect all documents you print from Windows applications, and will be remembered from one Windows session to the next.

#### **GENERAL TAB**

 This button prints a test page to ensure that your printer is working.



#### **DEVICE OPTIONS TAB**

In this window you can select which optional upgrades are installed on your printer. This is covered in more detail in the section in this guide about installing upgrades.

#### To select this tab:

- From the Printer Properties dialogue, select Printer Properties tab.
- **2.** From the drop down menu select the **Device Options** tab.



#### **COLOUR PRINTING**

The printer drivers supplied with your printer provide several controls for changing the colour output. For general use the automatic settings will suffice, providing reasonable default settings that will produce good results for most documents.

Many applications have their own colour settings, and these may override the settings in the printer driver. Please refer to the documentation for your software application for details on how that particular program's colour management functions.

#### FACTORS THAT AFFECT THE APPEARANCE OF PRINTS

If you wish to manually adjust the colour settings in your printer driver, please be aware that colour reproduction is a complex topic, and there are many factors to take into consideration. Some of the most important factors are listed below.

## Differences between the range of colours a monitor or printer can reproduce

- Neither a printer nor a monitor is capable of reproducing the full range of colours visible to the human eye. Each device is restricted to a certain range of colours. In addition to this, a printer cannot reproduce all of the colours displayed on a monitor, and vice versa.
- Both devices use very different technologies to represent colour. A monitor uses Red, Green and Blue (RGB) phosphors (or LCDs), a printer uses Cyan, Magenta, Yellow and Black (CMYK) toner or ink.
- A monitor can display very vivid colours such as intense reds and blues and these cannot be easily produced on any printer using toner or ink. Similarly, there are certain colours, (some yellows for example), that can be printed, but cannot be displayed accurately on a monitor. This disparity between monitors and printers is often the main reason that printed colours do not match the colours displayed on screen.

#### Viewing conditions

A print can look very different under different lighting conditions. For example, the colours in a print may look different when viewed standing next to a sunlit window, compared to how they look under standard office fluorescent lighting.

#### Printer driver colour settings

The driver settings for Manual colour can change the appearance of a print. There are several options available to help match the printed colours with those displayed on screen.

#### **Monitor settings**

The brightness and contrast controls on your monitor can change how your document looks on-screen. Additionally, your monitor's colour temperature influences how "warm" or "cool" the colours look.

There are several settings found on a typical monitor:

>	5000k	Warmest; yellowish lighting, typically used in graphics arts environments.
>	6500k	Cooler; approximates daylight conditions.
>	9300k	Cool; the default setting for many monitors and television sets.

(k = degrees Kelvin, a measurement of temperature.)

#### How your software application displays colour

Some graphics applications such as Corel Draw or Adobe Photoshop may display colour differently from "Office" applications such as Microsoft Word. Please see your application's on-line help or user manual for more information.

#### Paper type

The type of paper used can also significantly affect the printed colour. For example, a printout on recycled paper can look duller than one on specially formulated glossy paper.

#### **CHOOSING A COLOUR MATCHING METHOD**

There is no correct way to achieve a good match between the document displayed on your monitor, and its printed equivalent. There are many factors involved in achieving accurate and reproducible colour.

The following guidelines may help in achieving good colour output from your printer. There are several suggested methods, depending on the type of document you are printing.

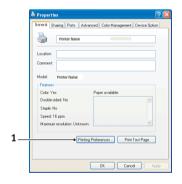
These suggestions are for guidance only. Your results may vary depending on the application from which you are printing. Some applications will override any colour matching settings in the printer driver without warning.

#### **ACCESSING THE COLOUR MATCHING OPTIONS**

The Colour Matching options in the printer driver can be used to help match your printed colours to the ones displayed on your monitor or from some other source, such as a digital camera.

To open colour matching options from the Windows Control Panel:

- Open the Printers window (called "Printers and Faxes" in Windows XP).
- **2.** Right-click the printer name and choose **Properties**.
- 3. Click the **Printing Preferences** button (1).



To open colour matching options from within a Windows application:

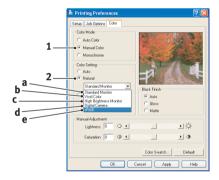
- 1. Choose **File—Print...** from the application's menu bar.
- 2. Click the **Properties** button next to the printer name.

#### **SETTING THE COLOUR MATCHING OPTIONS**

1. On the **Colour** tab select **Manual** for Colour Matching.



**2.** Choose the **Manual** colour setting and select from the following options:



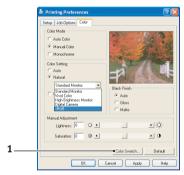
- (a) Monitor (6500k) Perceptual Optimised for printing daylight photographs.
- (b) Monitor (6500k) Vivid
  Optimised for printing bright colours. Good for office graphics.
- (c) Monitor (9300k)
  Optimised for printing photographs when using a professional graphics monitor.
- (d) Digital Camera
  Optimised for printing photographs taken with a digital camera. This tends to produce prints with lighter and

brighter colours. For some photographs, other settings may be better depending on the subjects and the conditions under which they were taken.

(e) sRGB Optimised for matching specific colours, such as a company logo colour. The colours within the printer's colour gamut are printed without any modification, and only colours that fall outside the printable colours are modified.

#### **USING THE COLOUR SWATCH FEATURE**

The Colour Swatch function prints charts which contain a range of sample colours. Note that this is not the full range of colours that the printer can produce. Listed on each sample colour are the corresponding RGB (Red, Green, Blue) values. This can be used to pick specific colours in applications that allow you to choose your own RGB values. Simply click the Color Swatch button (1) and choose from the options available.



#### An example of using the Colour Swatch function:

You wish to print a logo in a particular shade of red. The steps you would follow are:

- 1. Print a colour swatch, then select the shade of red that best suits your needs.
- **2.** Take a note of the RGB value for the particular shade that you liked.

3. Using your program's colour picker, enter these same RGB values, and change the logo to that colour.

The RGB colour displayed on your monitor may not necessarily match what was printed on the colour swatch. If this is the case, it is probably due to the difference between how your monitor and printer reproduce colour. Here, it is unimportant since your primary objective is to print the required colour.

#### **MENU FUNCTIONS**

This section lists the menus accessed via the controls on the printer's operator panel and displayed in the LCD window.

It should be noted that many of these settings can be, and often are, overridden by settings in the Windows printer drivers. However, several of the driver settings can be left at "Printer Setting," which will then default to the settings entered in these printer menus.

Factory default settings are shown in **bold type** in the following tables.

In the normal operating condition, known as "standby," the printer's LCD window will show "ONLINE." In this condition, to enter the menu system, press the +/- keys on the operator panel to move up and down through the list of menus until the menu you wish to view is displayed. The proceed as follows:

- 1. Press **ENTER** to enter the menu.
- 2. Use the +/- keys to move up and down through the items in the menu. When the item you want to change is displayed, press **ENTER** to edit that item. An asterisk (\*) appears next to the setting currently in effect.
- 3. Use the +/- keys to move up and down through the available settings for this item, and press **ENTER** when the setting you want is displayed. An asterisk (\*) will appear next to the setting, indicating that this setting is now in effect.
- 4. Press **BACK** to move back to the list of menu items.
- **5.** Do one of the following:
  - > Press **BACK** again to move up to the list of menus;

or...

Press ON LINE to exit from the menu system and return to standby.

## **INFORMATION MENU**

This menu provides a quick method of listing various items stored within the printer.

INFORMATION MENU		
Item	Action	Explanation
PRINT MENU MAP	EXECUTE	Prints complete menu listing with current settings shown.
DEMO1	EXECUTE	Prints demo page.

## **PRINT MENU**

This menu provides adjustment of various print job related functions.

PRINT MENU		
Item	Settings	Explanation
COPIES	1-999	Enter the number of copies of a document to be printed from 1 to 999.
PAPER FEED	TRAY1 TRAY2 MP TRAY	Selects the default tray for paper feed, Tray 1 (upper), Tray 2 (lower, if installed) or MP Tray (multipurpose tray).
<b>AUTO TRAY SWITCH</b>	ON/OFF	Turns Auto Tray Switch function ON or OFF.
TRAY SEQUENCE	DOWN UP PAPER FEED TRAY	Select Tray Sequences of Auto Tray Select and Auto Tray Switch
MP TRAY USAGE	DO NOT USE WHEN MISMATCH	If a document to be printed demands a paper size not installed in the selected tray, the printer can automatically feed from the multipurpose tray instead. If this function is not enabled, the printer will stop and request the correct size of paper to be loaded.
MEDIA CHECK	<b>ENABLE</b> DISABLE	Determines whether the printer check the size of paper loaded matches that required for the document sent to print.
MONO-PRINT SPEED	AUTO COLOR SPEED NORMAL SPEED	Selects the printer's print engine speed for the type of print media in use.

# **MEDIA MENU**

This menu provides adjustment to suit a wide range of print media.

MEDIA MENU		
Item	Settings	Explanation
TRAY1 PAPERSIZE	A4 / A5 / A6 / B5 LEGAL14 LEGAL13.5 LEGAL13 LETTER EXECUTIVE CUSTOM	Selects the size of paper loaded in Tray 1 (upper tray if both trays installed). For CUSTOM setting see X-DIMENSION and Y-DIMENSION later in this table.
TRAY1 MEDIATYPE	PLAIN LETTERHEAD BOND RECYCLED CARDSTOCK ROUGH	Selects the type of media loaded in this tray. This will help the printer to adjust its internal operating parameters, such as engine speed and fusing temperature, to better accommodate the media to be fed. For example, letterhead may benefit from a slightly lower fusing temperature to ensure that its ink does not offset.
TRAY1 MEDIAWEIGHT	LIGHT (64-74g/m²) <b>MEDIUM</b> (75-104g/m²) HEAVY (105-120g/m²)	Adjusts the printer for the weight of paper stock loaded in thus tray.
TRAY2 PAPERSIZE	A4 / A5 / B5 / LEGAL14 LEGAL13.5 LEGAL13 LETTER EXECUTIVE CUSTOM	Selects the size of paper loaded in Tray 2 (lower) if installed. For CUSTOM setting see X-DIMENSION and Y-DIMENSION later in this table.
TRAY2 MEDIATYPE	PLAIN LETTERHEAD BOND RECYCLED CARDSTOCK ROUGH	Selects the type of media loaded in this tray.
TRAY2 MEDIAWEIGHT	LIGHT (64-74g/m²) <b>MEDIUM</b> (75-104g/m²) HEAVY (105-120g/m²) ULTRA HEAVY (121-175g/m²)	Adjusts the printer for the weight of paper stock loaded in this tray.

MEDIA MENU		
Item	Settings	Explanation
MPT PAPERSIZE	A4 / A5 / A6 / B5 LEGAL14 LEGAL13.5 LEGAL13 LETTER EXECUTIVE CUSTOM COM-9 ENVELOPE COM-10 ENVELOPE MONARCH ENV DL ENVELOPE C5 ENVELOPE	Selects the size of paper to be fed from the multipurpose tray. For CUSTOM setting see X-DIMENSION and Y-DIMENSION later in this table.
MPT PAPERTYPE	PLAIN LETTERHEAD TRANSPARENCY LABELS BOND RECYCLED CARD STOCK ROUGH	Selects the type of media to be fed from the multipurpose tray so that the printer can adjust its internal parameters to better accommodate the selected type of media.
MPT MEDIAWEIGHT	MEDIUM (75-90g/m²) HEAVY (91-121g/m²) ULTRA HEAVY (122- 203g/m²)	Selects the media weight to be fed from the multipurpose tray.
UNIT OF MEASURE	MILLIMETER INCH	Selects the unit of measure for the next two items.
X-DIMENSION	100- <b>210</b> -216 MILLIMETER	Selects the width of paper defined by the "CUSTOM" settings referred to in the foregoing PAPER SIZE settings.
Y-DIMENSION	148- <b>297</b> -1200 MILLIMETER	Selects the length of paper defined by the "Custom" settings referred to in the foregoing PAPER SIZE settings. Note that media of up to 1200mm in length can be fed from the multipurpose tray for banner printing.

## **COLOR MENU**

The printer automatically adjusts colour balance and density at appropriate intervals, optimising the printed output for bright white paper viewed in natural daylight conditions. The items on this menu provide a means of changing the default settings for special or particularly difficult print jobs. Settings revert to their default values when the next print job is complete.

COLOR MENU		
Item	Settings	Explanation
DENSITY CONTROL	AUTO MANUAL	If set to AUTO, image density will be automatically adjusted at power on, when a new image drum or toner cartridge is installed, and at intervals of 100, 300 and 500 drum counts. If a 500 drum count interval occurs during a print job it will occur at the end of that job, and will take up to 55 seconds. If set to manual, this adjustment will only be performed when initiated by the next menu item.
ADJUST DENSITY	EXECUTE	Selecting this will perform the auto density set up immediately.
AJST REGISTRATION	EXECUTE	Performs automatic colour registration adjustment. Normally this is done on power on and when the top cover is opened and then closed. This process accurately aligns the cyan, magenta and yellow images to the black image.
C REG FINE ADJUST M REG FINE ADJUST Y REG FINE ADJUST	-3~ <b>0</b> ~+3	Performs fine adjustment of image timing in relation to the black image component.

# **SYSTEM CONFIGURATION MENU**

This menu adjusts general printer settings to suit the way you prefer to work.

SYSTEM CONFIGURATION MENU		
Items	Settings	Explanation
POW SAVE TIME	5 15 30 <b>60</b> 240	Adjusts the idling time before the printer automatically switches into power saving mode. In this mode power consumption is reduced to a low level required to just keep the printer operating and ready to receive data. When a job is sent the printer will require a warm-up time of up to 1 minute before printing can begin.
CLEARABLE WARNING	ON JOB	When ON, non-critical warnings, such as requests for a different paper size, can be cleared by pressing the <b>ON LINE</b> button. When set to JOB, they are cleared when the print job resumes.
MANUAL TIMEOUT	OFF 30 <b>60</b>	Specifies how many seconds the printer will wait for paper to be fed before cancelling the job.
WAIT TIMOUT	5~ <b>40</b> ~300	Specifies how many seconds the printer will wait when received data pauses before forcing a page eject. In PostScript Emulation mode the job will be cancelled if timeout occurs.
LOW TONER	CONTINUE STOP	Specifies whether the printer should continue printing even after a low toner condition is detected.
JAM RECOVERY	<b>ON</b> OFF	Specifies whether the printer should perform jam recovery after a paper jam has occurred. If ON, the printer will attempt to print again any pages lost due to a paper jam once the jam has been cleared.
LANGUAGE	English, German, French, Italian, Spanish, Swedish, Norwegian, Danish, Dutch, Turkish, Portuguese, Polish	Sets the language used for the display window and printed reports.

## **USB MENU**

This menu controls the operation of the printer's USB data interface.

USB MENU		
Item	Settings	Explanation
VERSION	1.1 / 2.0	Selects USB version for compatibility.
SOFT RESET	ENABLE / <b>DISABLE</b>	Enables or disables the SOFT RESET command.

## **NETWORK MENU**

This menu controls the operation of the printer's 10Base-T/100Base-T network interface.

NETWORK MENU		
Item	Settings	Explanation
TCP/IP	<b>ENABLE</b> / DISABLE	Enables or disables this network protocol.
NETBEUI	ENABLE / <b>DISABLE</b>	Enables or disables this network protocol.
IP ADDRESS SET	AUTO / MANUAL	Specifies whether IP address allocation is automatic (DHCP) or manually assigned.
IP ADDRESS	XXX.XXX.XXX	Current assigned IP address. To change, press ENTER and use +/- keys to increment 1st octet, then press ENTER again to move on to next octet. When 4th octet has been set, press ENTER again to register new address.
SUBNET MASK	xxx.xxx.xxx	Current assigned subnet mask. To change, proceed as above.
GATEWAY ADDRESS	xxx.xxx.xxx	Current assigned gateway address. To change, proceed as above.
INITIALIZE NIC?	EXECUTE	Initialises the network hardware.
WEB/IPP	ENABLE / DISABLE	Enables or disables Web config. facility and Internet Printing Protocol.
TELNET	<b>ENABLE</b> / DISABLE	Enables or disables Telnet config. facility.
FTP	<b>ENABLE</b> / DISABLE	Enables or disables communication via FTP.
SNMP	<b>ENABLE</b> / DISABLE	Enables or disables SNMP protocol.
LAN	NORMAL / SMALL	

## **MEMORY MENU**

This menu determines how printer memory is used.

Memory Menu		
Item	Settings	Explanation
RECEIVE BUF SIZE	<b>AUTO</b> , 0.5MB, 1MB, 2MB, 4MB, 8MB, 16MB	Sets the size of buffer memory for receiving incoming data. Normally this is allocated dynamically as required.
FLASH INITIALIZE	EXECUTE	Clears all data from flash memory.

# **SYSTEM ADJUSTMENT MENU**

This menu provides fine adjustment of image position on the printed page in steps of 0.25mm.

Sys Adjust Menu		
Item	Settings	Explanation
X ADJUST	-2.00 ~ 0 ~ +2.00	Horizontal position.
Y ADJUST	-2.00 ~ 0 ~ +2.00	Vertical position.

# **MAINTENANCE MENU**

This menu provides access to various printer maintenance functions.

MAINTENANCE MENU		
Item	Settings	Explanation
MENU RESET	EXECUTE	Resets menus to default settings.
SAVE MENU	EXECUTE	Saves current menu settings as default values. At confirmation prompt, press <b>ENTER</b> to confirm save, or <b>CANCEL</b> to cancel.
POWER SAVE	ENABLE / DISABLE	Enables or disables automatic power save mode. Delay before entering this mode is set in the system configuration menu.
PAPER BLACK SETTING	-2~0~+2	Used for small adjustment when you experience faded print or light specks / streaking in monochrome printing on white paper. Select a higher value to reduce fading, or a lower value to reduce specks or streaking in high density print areas.
PAPER COLOR SETTING	-2~0~+2	As above, but for colour printing.
TRANSPR BLACK SETTING	-2~0~+2	As above but for mono printing on transparencies.
TRANSPR COLOR SETTING	-2~0~+2	As above but for colour printing on transparencies.

## **USAGE MENU**

This menu is for information only, and provides an indication of total usage of the printer and the expected life left in its consumable items. This is particularly useful if you do not have a full set of replacement consumables to hand and you need to know how soon you will need them.

USAGE MENU	
Item	Explanation
TOTAL PAGE COUNT	The total number of prints output by the printer.
TRAYn PAGE COUNT	The total number of pages fed from tray n.
MPT PAGE COUNT	The total number of pages fed from the multipurpose tray.
COLOR PAGE COUNT	The total number of pages printed in colour.
MONO PAGE COUNT	The total number of pages printed in monochrome.
K DRUM LIFE REMAINING C DRUM LIFE REMAINING M DRUM LIFE REMAINING Y DRUM LIFE REMAINING	Percentage of life remaining in these consumable items.
K TONER C TONER M TONER Y TONER	Current toner level for 5,000 page and 3,000 page cartridges.

# REPLACING CONSUMABLE ITEMS

This section explains how to replace consumable items when due. As a guide, the life expectancy of these items is:

- Toner 5,000 A4 pages at 5% coverage, which means that 5% of the addressable print area is printed with this colour. Toner life is directly affected by coverage, e.g. at 10% coverage there is sufficient toner for 2,500 pages, conversely at 2.5% there is sufficient toner for 10,000 pages in the cartridge.
  - The printer is shipped with sufficient toner for 3,000 A4 pages in the print cartridges of which 1,500 A4 pages of toner are used to charge the image drum.
- > Image drum 17,000 pages (calculated on typical office usage where 20% of printing is 1 page only, 30% is 3 page documents and 50% is print runs of 15 pages or more).
- > Transfer belt Approximately 50,000 A4 pages.
- Fuser Approximately 45,000 A4 pages.

## **CONSUMABLE ORDER DETAILS**

Item	Life	Order No.
Toner, high capacity, black	5,000 A4 @ 5%	42127408
Toner, high capacity, cyan	5,000 A4 @ 5%	42127407
Toner, high capacity, magenta	5,000 A4 @ 5%	42127406
Toner, high capacity, yellow	5,000 A4 @ 5%	42127405
Toner, rainbow pack (1 ea. CMYK)	5,000 A4 @ 5%	42403002
Image drum, black	17,000 A4 pages*	42126608
Image drum, cyan	17,000 A4 pages*	42126607
Image drum, magenta	17,000 A4 pages*	42126606
Image drum, yellow	17,000 A4 pages*	42126605
Fuser	45,000 A4 pages	42158603
Transport belt	50,000 A4 @ 3/job	42158702

<sup>\*</sup> Average life

Please always use genuine Oki consumables. Use of "compatibles" and counterfeit items may impair performance and could cause product damage, which is not covered under the warranty.

#### TONER CARTRIDGE REPLACEMENT

The toner used in this printer is a very fine dry powder. It is contained in four cartridges: one each for cyan, magenta, yellow and black.

Have a sheet of paper handy so that you have somewhere to place the used cartridge while you install the new one.

Dispose of the old cartridge responsibly, inside the pack that the new one came in. Follow any regulations, recommendations, etc., which may be in force concerning waste recycling.

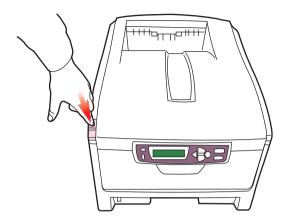
If you do spill any toner powder, lightly brush it off. If this is not enough, use a cool, damp cloth to remove any residue. Do not use hot water, and never use solvents of any kind. They will make stains permanent.

#### **WARNING!**

If you inhale any toner or get it in your eyes, drink a little water or bathe your eyes liberally in cold water. Seek medical attention immediately.

Switch off the printer and allow the fuser to cool for about 10 minutes before opening the cover.

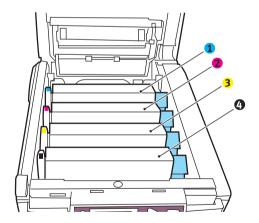
1. Press the cover release and open the printer's top cover fully.



## **WARNING!**

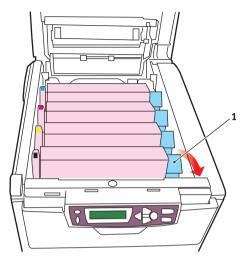
If the printer has been powered on, the fuser may be hot. This area is clearly labeled. Do not touch.

2. Note the positions of the four cartridges.

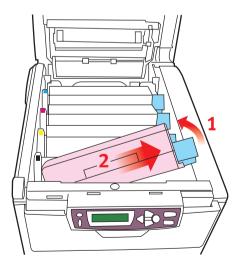


- 1. Cyan cartridge
- 2. Magenta cartridge
- 3. Yellow cartridge
- 4. Black cartridge

**3.** Pull the coloured toner release lever (1) on the cartridge to be replaced towards the front of the printer.



4. Lift the right-hand end of the cartridge and then draw the cartridge to the right to release the left-hand end as shown, and withdraw the toner cartridge out of the printer.

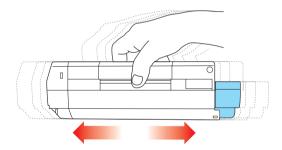


5. Put the cartridge down gently onto a piece of paper to prevent toner from marking your furniture and to avoid damaging the green drum surface.

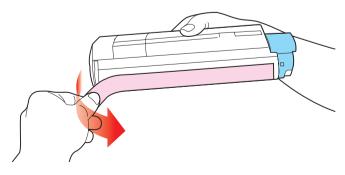
#### **CAUTION!**

The green image drum surface at the base of the cartridge is very delicate and light sensitive. Do not touch it and do not expose it to normal room light for more than 5 minutes. If the drum unit needs to be out of the printer for longer than this, please wrap the cartridge inside a black plastic bag to keep it away from light. Never expose the drum to direct sunlight or very bright room lighting.

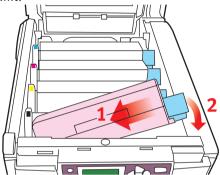
- **6.** Remove the new cartridge from its box but leave its wrapping material in place for the moment.
- 7. Gently shake the new cartridge from end to end several times to loosen and distribute the toner evenly inside the cartridge.



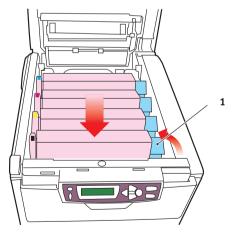
**8.** Remove the wrapping material and peel off the adhesive tape from the underside of the cartridge.



- **9.** Holding the cartridge by its top centre with the coloured lever to the right, lower it into the printer over the image drum unit from which the old cartridge was removed.
- 10. Insert the left end of the cartridge into the top of the image drum unit first, pushing it against the spring on the drum unit, then lower the right end of the cartridge down onto the image drum unit.



11. Pressing gently down on the cartridge to ensure that it is firmly seated, push the coloured lever (1) towards the rear of the printer. This will lock the cartridge into place and release toner into the image drum unit.



**12.** Finally, close the top cover and press down firmly at both sides so that the cover latches closed.

## **IMAGE DRUM REPLACEMENT**

Switch off the printer and allow the fuser to cool for about 10 minutes before opening the cover.

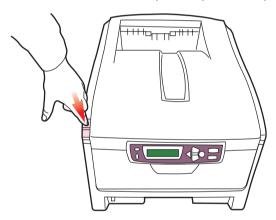
## **CAUTION!**



Static sensitive devices, handle with care.

The printer contains four image drums: cyan, magenta, yellow and black.

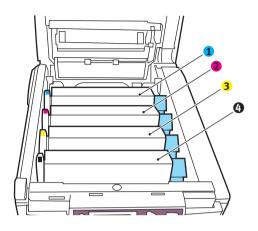
1. Press the cover release and open the printer's top cover fully.



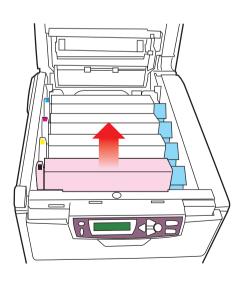
#### **WARNING!**

If the printer has been powered on, the fuser will be hot. This area is clearly labeled. Do not touch.

2. Note the positions of the four cartridges.



- 1. Cyan cartridge
- 2. Magenta cartridge
- 3. Yellow cartridge
- 4. Black cartridge
- **3.** Holding it by its top centre, lift the image drum, complete with its toner cartridge, up and out of the printer.

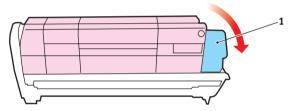


4. Put the cartridge down gently onto a piece of paper to prevent toner from marking your furniture and to avoid damaging the green drum surface.

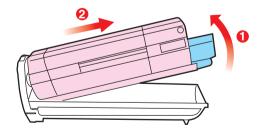
#### **CAUTION!**

The green image drum surface at the base of the cartridge is very delicate and light sensitive. Do not touch it and do not expose it to normal room light for more than 5 minutes. If the drum unit needs to be out of the printer for longer than this, please wrap the cartridge inside a black plastic bag to keep it away from light. Never expose the drum to direct sunlight or very bright room lighting.

5. With the coloured toner release lever (1) to the right, pull the lever towards you. This will release the bond between the toner cartridge and the image drum cartridge.

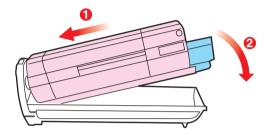


6. Lift the right-hand end of the cartridge and then draw the cartridge to the right to release the left-hand end as shown, and withdraw the toner cartridge out of the image drum cartridge. Place the cartridge on a piece of paper to avoid marking your furniture.

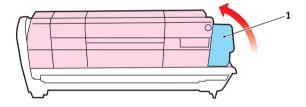


7. Take the new image drum cartridge out of its packaging and place it on the piece of paper where the old cartridge was

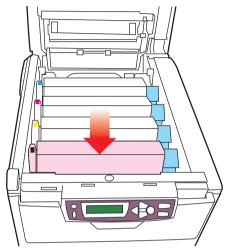
- placed. Keep it the same way round as the old unit. Pack the old cartridge inside the packaging material for disposal.
- 8. Place the toner cartridge onto the new image drum cartridge as shown. Push the left end in first, and then lower the right end in. (It is not necessary to fit a new toner cartridge at this time unless the remaining toner level is very low.)



9. Push the coloured release lever (1) away from you to lock the toner cartridge onto the new image drum unit and release toner into it.



**10.** Holding the complete assembly by its top centre, lower it into place in the printer, locating the pegs at each end into their slots in the sides of the printer cavity.



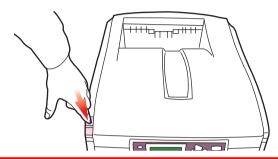
11. Finally, close the top cover and press down firmly at both sides so that the cover latches closed.

## REPLACING THE BELT UNIT

The belt unit is located under the four image drums. This unit requires replacement approximately every 50,000 pages.

Switch off the printer and allow the fuser to cool for about 10 minutes before opening the cover.

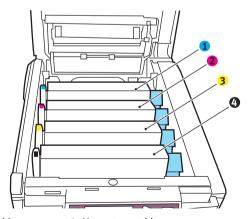
1. Press the cover release and open the printer's top cover fully.



#### **WARNING!**

If the printer has been powered on, the fuser will be hot. This area is clearly labeled. Do not touch.

2. Note the positions of the four cartridges. It is essential that they go back in the same order



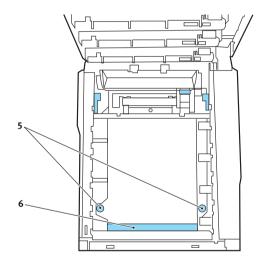
- 1. Cyan cartridge
- 2. Magenta cartridge
- 3. Yellow cartridge
- 4. Black cartridge

3. Lift each of the image drum units out of the printer and place them in a safe place away from direct sources of heat and light.

#### **CAUTION!**

The green image drum surface at the base of each cartridge is very delicate and light sensitive. Do not touch it and do not expose it to normal room light for more than 5 minutes. If the drum unit needs to be out of the printer for longer than this, please wrap the cartridge inside a black plastic bag to keep it away from light. Never expose the drum to direct sunlight or very bright room lighting.

4. Locate the two fasteners (5) at each side of the belt and the lifting bar (6) at the front end.



- 5. Turn the two fasteners 90° to the left. This will release the belt from the printer chassis.
- **6.** Pull the lifting bar (6) upwards so that belt tilts up towards the front, and withdraw the belt unit from the printer.
- 7. Lower the new belt unit into place, with the lifting bar at the front and the drive gear towards the rear of the printer. Locate the drive gear into the gear inside the printer by the rear left

- corner of the unit, and lower the belt unit flat inside the printer.
- **8.** Turn the two fasteners (5) 90° to the right until they lock. This will secure the belt unit in place.
- 9. Replace the four image drums, complete with their toner cartridges, into the printer in the same sequence as they came out: cyan (nearest the rear), magenta, yellow and black (nearest the front).
- **10.** Finally, close the top cover and press down firmly at both sides so that the cover latches closed.

## **FUSER REPLACEMENT**

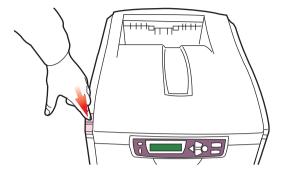
The fuser is located inside the printer just behind the four image drum units.

#### **WARNING!**

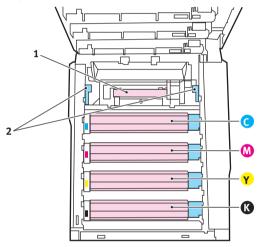
If the printer has recently been powered on, some fuser components will be very hot. Handle the fuser with extreme care, holding it only by its handle, which will only be mildly warm to the touch. A warning label clearly indicates the area. If in doubt, switch the printer off and wait at least 10 minutes for the fuser to cool before opening the printer cover.

Switch off the printer and allow the fuser to cool for about 10 minutes before opening the cover.

1. Press the cover release and open the printer's top cover fully.

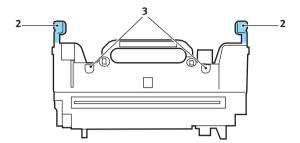


2. Identify the fuser handle (1) on the top of the fuser unit.

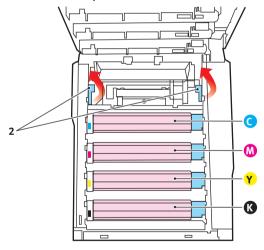


- 3. Pull the two fuser retaining levers (2) towards the front of the printer so that they are fully upright.
- 4. Holding the fuser by its handle (1), lift the fuser straight up and out of the printer. If the fuser is still warm, place it on a flat surface which will not be damaged by heat.
- **5.** Remove the new fuser from its packaging and remove the transit material.

6. Holding the new fuser by its handle, make sure that it is the correct way round. The retaining levers (2) should be fully upright, and the two locating lugs (3) should be towards you.



- 7. Lower the fuser into the printer, locating the two lugs (3) into their slots in the metal partition which separates the fuser area from the image drums.
- **8.** Push the two retaining levers (2) towards the rear of the printer to lock the fuser in place.



**9.** Finally, close the top cover and press down firmly at both sides so that the cover latches closed.

# **INSTALLING UPGRADES**

This section explains how to install optional equipment into your printer. This includes:

- duplex (two sided printing) unit;
- > additional RAM memory.

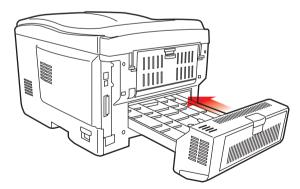
#### **DUPLEX UNIT**

The duplex unit adds the function of two sided printing, using less paper and making large documents easier to handle. It also enables booklet printing, which uses even less paper and makes large documents even easier to handle.

The duplex unit slides straight into the rear of the printer and requires no tools to install.

Ensure printer is switched off at the AC outlet and remove cable from printer AC input socket.

- 1. Unpack the new unit and remove any transit material from it.
- 2. Ensure that the unit is the right way up, as shown, and push it into the slot behind the rear panel. The panel will swing inwards as you push the unit into it. Push the unit all the way in until it stops and latches home.



3. Switch the printer on and wait for it to warm up (about 1 minute).

- 4. Print a menu map as follows:
  - (a) Press the + button to access the Information Menu.
  - **(b)** Press **ENTER** once for the menu map.
  - (c) Press **ENTER** again to print the menu map.
  - (d) When the menu map is printed, press **ON LINE** to exit the menu system.
- **5.** Examine the first page of the menu map.

Near the top of the page, between the two horizontal lines, you will see the current printer configuration. This list should indicate that the duplex unit is now installed.

All that remains is to adjust the Windows printer driver to make full use of the new features.

#### MEMORY UPGRADE

The basic printer model comes equipped with 32MB of main memory. This can be upgraded with an additional memory board containing 64MB or 256MB, giving a maximum total memory capacity of 288MB.

Installation takes a few minutes, and requires a medium size crosshead (philips type) screwdriver.

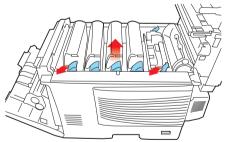
- 1. Switch the printer off and disconnect the AC power cable.
- 2. Press the cover release and open the printer's top cover fully.



#### **WARNING!**

If the printer has been powered on recently, the fuser will be hot. This area is clearly labeled. Do not touch.

- 3. Lift the front cover latch and pull open the front cover.
- **4.** Remove the screw securing the right-hand side cover.

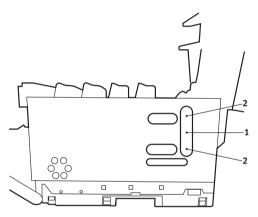


5. Lift the edge of the side cover slightly at the two points shown, and pull the cover away from the printer at the top. Lift the cover slightly to detach it from the printer. Place it safely to one side.

- 6. Carefully remove the new memory board from its wrapping. Try to handle the board only by its short edges, avoiding contact with any metal parts as far as possible. In particular, avoid touching the edge connector.
- 7. Notice that the memory board has a small cutout in the edge connector, which is closer to one end than the other.



8. Identify the RAM expansion slot (1) in the printer.



- 9. If the RAM expansion slot already contains a memory upgrade board, that board will have to be removed before you can install the new one. To remove it proceed as follows, otherwise skip to step 10.
  - (a) Identify the locking clips (2) at each end of the RAM expansion slot (1).
  - **(b)** Push the clips outward and back into the printer. The board will pop out slightly.
  - (c) Grip the board firmly by its short edges and pull it out of the slot.
  - (d) Place the removed memory board in the antistatic bag which originally contained the new memory board.

- **10.** Hold the new memory board by its short edges, so that the edge connector faces in towards the RAM expansion slot, and the small cutout is closer to the bottom of the printer.
- **11.** Gently push the board into the RAM expansion slot until it latches in and will not go any further.
- **12.** Locate the three retaining clips at the bottom of the side cover into their rectangular holes near the bottom of the printer.
- 13. Close the top of the side cover up to the printer and refit the securing screw removed in step 4.
- **14.** Close the front cover and close the top cover, pressing down firmly at each side to latch it closed.
- **15.** Reconnect the AC power cable and switch the printer on.
- **16.** When the printer is ready, print a menu map as follows:
  - (a) Press the + button to access the Information Menu.
  - **(b)** Press **ENTER** once for the menu map.
  - (c) Press **ENTER** again to print the menu map.
  - (d) When the menu map is printed, press **ON LINE** to exit the menu system.
- **17.** Examine the first page of the menu map.

Near the top of the page, between the two horizontal lines, you will see the current printer configuration. This list contains the figure for total memory size.

This should indicate the total memory now installed, which should be the size of memory board you have installed plus 32MB.

#### **SECOND PAPER TRAY**

An additional paper tray can be installed and, when combined with the standard paper tray, increases the paper capacity to 830 sheets (approximately).

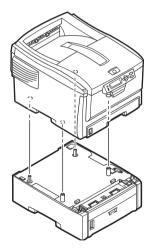
#### Installation

1. Switch off the printer and disconnect the power cable and printer interface cable.

#### **WARNING!**

The printer weighs 26 kg. 2 people are required to lift the printer safely and prevent any personal injury.

2. Lower the printer gently on to the additional paper tray unit aligning the holes and connection socket on the base of the printer with the locating pegs and plug on the additional paper tray unit.



3. Connect the printer interface cable and power cable, then switch on the printer.

All that remains is to adjust the Windows printer driver to make full use of the new features.

## ADJUSTING WINDOWS PRINTER DRIVERS

Once your new upgrade has been installed, you may need to update the Windows printer driver so that the additional features are available to your Windows applications.

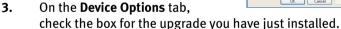
Remember that if your printer is shared between users on different computers, the driver must be adjusted on each user's machine.

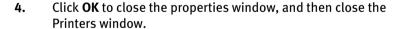
The illustrations shown here are for Windows XP. Other Windows versions may appear slightly different, but the principles are the same.

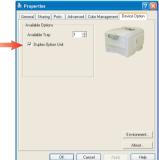
If you have installed a memory upgrade it is not necessary to change the printer driver, and you can ignore this section.

If you have installed a duplex unit, proceed as follows:

- Open the Printers window (called "Printers and Faxes" in Windows XP) via the Start Menu or from the Windows Control Panel.
- Right-click the printer icon for this printer, and choose Properties from the pop-up menu.





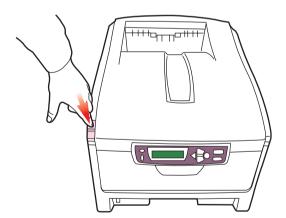


# **CLEARING PAPER JAMS**

Provided that you follow the recommendations in this guide on use of print media, and you keep the media in good condition prior to use, your printer should give years of reliable service. However, paper jams occasionally do occur, and this section explains how to clear them guickly and simply.

Jams can occur due to paper misfeeding from a paper tray or at any point on the paper path through the printer. When a jam occurs, the printer immediately stops, and the LCD window on the operator panel informs you of the event. If printing multiple pages (or copies), do not assume that having cleared an obvious sheet that others will not also be stopped somewhere along the path. These must also be removed in order to clear the jam fully and restore normal operation.

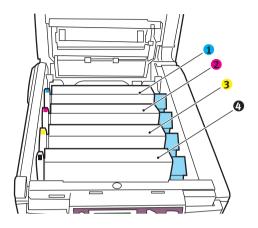
- 1. If a sheet is well advanced out of the top of the printer, simply grip it and pull gently to draw it fully out. If it does not remove easily, do not use excessive force. It can be removed from the rear later.
- **2.** Press the cover release and open the printer's top cover fully.



#### WARNING!

If the printer has been powered on, the fuser will be hot. This area is clearly labeled. Do not touch.

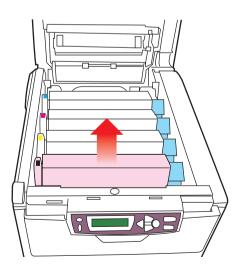
3. Note the positions of the four cartridges.



- 1. Cyan cartridge
- 2. Magenta cartridge
- 3. Yellow cartridge
- 4. Black cartridge

It will be necessary to remove the four image drums to gain access to the paper path.

4. Holding it by its top centre, lift the image drum, complete with its toner cartridge, up and out of the printer.

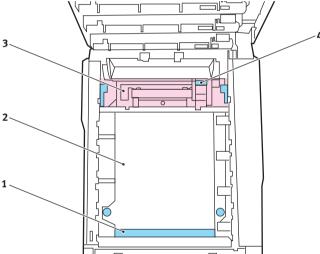


**5.** Put the cartridge down gently onto a piece of paper to prevent toner from marking your furniture and to avoid damaging the green drum surface.

#### **CAUTION!**

The green image drum surface at the base of the cartridge is very delicate and light sensitive. Do not touch it and do not expose it to normal room light for more than 5 minutes.

- **6.** Repeat this removal procedure for each of the four image drum units.
- 7. Look into the printer to check whether any sheets of paper are visible on any part of the belt unit.

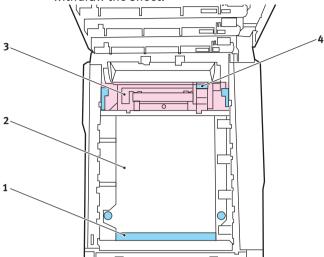


To remove a sheet with its leading edge at the front of the belt (1), carefully lift the sheet from the belt and pull it forwards into the internal drum cavity and withdraw the sheet.

#### **CAUTION!**

Do not use any sharp or abrasive objects to separate sheets from the belt. This may damage the belt surface.

> To remove a sheet from the central area of the belt (2), carefully separate the sheet from the belt surface and withdraw the sheet.

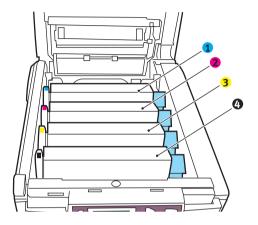


To remove a sheet just entering the fuser (3), separate the trailing edge of the sheet from the belt, push the fuser pressure release lever (4) towards the front and down to release the fuser's grip on the sheet, and withdraw the sheet through the drum cavity area. Then allow the pressure release lever to rise again.

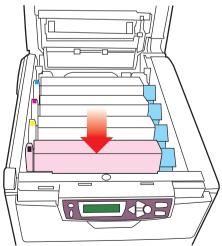
#### **NOTE**

If the sheet is well advanced into the fuser (only a short length is still visible), do not attempt to pull it back. Follow the next step to remove it from the rear of the printer.

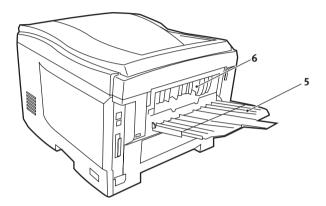
8. Starting with the cyan image drum unit nearest the fuser, replace the four image drums back into the drum cavity, making sure to locate them in the correct order.



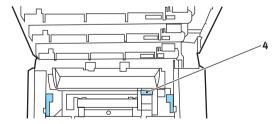
- 1. Cyan cartridge
- 2. Magenta cartridge
- 3. Yellow cartridge
- 4. Black cartridge
- Holding the complete assembly by its top centre, lower it into place in the printer, locating the pegs at each end into their slots in the sides of the printer cavity.



- 9. Lower the top cover down but do not press down to latch it closed yet. This will protect the drums from excessive exposure to room lighting while you check the remaining areas for jammed sheets.
- **10.** Open the rear exit tray (5) and check for a sheet of paper in the rear path area (6)

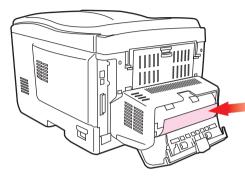


- > Pull out any sheets found in this area.
- > If the sheet is low down in this area and difficult to remove, it is probably still gripped by the fuser. In this case raise the top cover, reach around and press down on the fuser pressure release lever (4).



11. If not using the rear exit tray, close it once paper has been removed from this area.

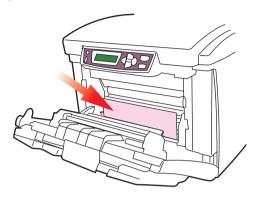
12. If your printer has a duplex unit installed, press the cover release at the centre of the unit, open the cover and remove any sheets in this area, then close the cover



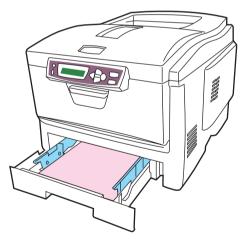
13. Lift the front cover release and pull open the front cover.



**14.** Check inside the cover for sheets in this area and remove any that you find, then close the cover.



15. Pull out the paper tray in use when the jam occurred and ensure that all paper is stacked properly, is undamaged, and that the paper guides are properly positioned against the edges of the paper stack. When satisfied, replace the tray.



**16.** Finally, close the top cover and press down firmly at both sides so that the cover latches closed.

When the jam has been cleared, if Jam Recovery is set to ON in the System Configuration Menu, the printer will attempt to reprint any pages lost due to paper jams.

# **SPECIFICATIONS**

Item	Specification
Dimensions	400 x 528 x 330mm (W x D x H)
Weight	25Kg
Print speeds	12 pages per minute colour / 20 pages per minute monochrome
Resolution	600dpi or 600 x 1200dpi
Emulations	Windows GDI
Auto Features	Auto registration Auto density adjustment Auto consumable counter reset
Memory	32MB standard, upgradable to 128MB or 288MB
Paper capacity at 80g/m <sup>2</sup>	300 sheets in main tray 530 sheets in optional 2nd tray 50 sheets in multipurpose tray
Paper weight	$60 \sim 120 g/m^2$ in main tray $60 \sim 176 g/m^2$ in 2nd tray $75 \sim 203 g/m^2$ in multipurpose tray
Paper output	250 sheets in face down (top) stacker @ 80g/m² 100 sheets in face up (rear) stacker @ 80g/m²
Printer life	420,000 pages or 5 years
Duty cycle	20,000 pages per month max., 4,000 pages per month average
Toner life	5,000 pages at 5% coverage
Image drum life	15,000 pages at 3 pages per job
Belt life	50,000 A4 pages at 3 pages per job
Fuser life	45,000 A4 pages

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# **OKI CONTACT DETAILS**

#### Oki Systems (UK) Limited

550 Dundee Road Slough Trading Estate Slough, SL1 4LE

Tel:44 (0) 1753 819819 Fax:44 (0) 1753 819899 http://www.oki.co.uk

#### Oki Systems Ireland Limited

The Square Industrial Complex Tallaght, Dublin 24, Ireland

Tel:+353 1 4049590 Fax:+353 1 4049591 http://www.oki.ie

#### OKI Systems (Ireland) Ltd.

40 Sydenham Park Belfast, BT4 1PW

Tel:+44 44 (0)28 90 20 1110 http://www.oki.ie

#### Technical Support for all of Ireland:

Tel: +353 1 4049570 Fax: +353 1 4049555 E-mail: tech.support@oki.ie

## Oki Data Corporation

4-11-22 Shibaura, Minato-ku, Tokyo 108-8551, Japan

Tel: (81) 3 5445 6158 Fax: (81) 3 5445 6189 http://www.okidata.co.jp

#### Oki Data (Singapore) Pte. Ltd.

78 Shenton Way, #09-01, Singapore 079120

Tel: (65) 221 3722 Fax: (65)421 1688

http://www.okidata.com.sg

#### Oki Systems (Thailand) Ltd.

956 Udomvidhya Building 6th Floor, Rama IV Rd., Bangkok 10500, Thailand

Tel: (662) 636 2535 Fax: (662) 636 2536 http://www.okisysthai.com

#### Oki Hong Kong Limited

Suite 1909, Tower3, China Hong Kong City, 33 Canton Rd., Tsimshatsui, Kowloon, Hong Kong

Tel: (852) 2736 0130 Fax: (852) 2376 3725

#### The IPL Group

63-85 Victoria Street Beaconsfield NSW 2015, Australia

Tel: (61) 2 9690 8200 Fax: (61) 2 9690 8300 http://www.oki.com.au

## Comworth Systems Ltd.

10 Constellation Drive Mairangi Bay, Auckland, New Zealand

Tel: (64) 9 477 0500 Fax: (64) 9 477 0549 http://www.comworth.co.nz C5100n





OKI EUROPE, PART OF OKI ELECTRIC

CENTRAL HOUSE BALFOUR ROAD, HOUNSLOW TW3 1HY UNITED KINGDOM TEL +44 (0) 20 8219 2190 FAX +44 (0) 20 8219 2199